

In the Claims:

1. (Currently Amended) A method, comprising:
- asserting an edge-triggered interrupt signal from an input/output interrupt controller located within a system logic device to a local interrupt controller located within a processor; and
- delivering an interrupt pending signal from the processor to a power management device unit located within the system logic device.
2. (Currently Amended) The method of claim 1, further comprising the power management device causing the processor to enter a high power state if the processor is in a low power state when the processor delivers the interrupt pending signal to the power management unit device.
3. (Currently Amended) The method of claim 2, wherein delivering an interrupt pending signal includes delivering the interrupt pending signal from the processor to the power management unit device over a single signal line coupled between a single processor pin and the ~~power management~~ system logic device.
4. (Currently Amended) The method of claim 3, wherein causing the processor to enter a high power state includes the power management ~~device~~ unit deasserting a stop clock signal.

5. (Currently Amended) A method, comprising:

asserting an edge-triggered interrupt signal from an input/output interrupt controller located within a system logic device to a local interrupt controller located within a processor;

setting a bit within the processor indicating that an interrupt is pending; and
polling the processor to determine if an interrupt is pending.

6. (Original) The method of claim 5, wherein polling the processor to determine if an interrupt is pending includes polling the processor to determine if an interrupt is pending only if the processor is in a low power state.

7. (Original) The method of claim 6, further comprising causing the processor to enter a high power state if the polling of the processor reveals that an interrupt is pending.

8. (Currently Amended) The method of claim 7, wherein causing the processor to enter a high power state includes deasserting a stop clock signal delivered from a power management ~~device~~ unit located within the system logic device to the processor.

9. (Currently Amended) A system, comprising:

a processor including a local interrupt controller and an interrupt pending signal output;

a system logic device including an input/output interrupt controller coupled to the processor, the input/output interrupt controller to deliver an edge-triggered interrupt signal to the processor; and

a power management devicee unit located within the system logic device including an interrupt pending signal input coupled to the interrupt pending signal output of the processor, the processor to assert the interrupt pending signal in response to the delivery of the edge-triggered interrupt signal.

10. (Currently Amended) The system of claim 9, wherein the processor further includes a stop clock signal input, the processor to cease executing instructions in response to an assertion of the stop clock signal by the power management unit devicee.

11. (Currently Amended) The system of claim 10, the power management unit devicee to cause the processor to enter a high power state if the processor is in a low power state when ~~it~~ the processor asserts the interrupt pending signal.

12. (Currently Amended) The system of claim 11, wherein the power management unit devicee causes the processor to enter the high power state be deasserting the stop clock signal.

13. Cancelled

14. Cancelled

15. Cancelled

16. Cancelled